FINAL

Office of River Protection

Tri-Party Agreement Project Summary Report June 28, 2011



Office of River Protection Tri-Party Agreement Milestone Review Meeting June 28, 2011

Page	Topic	Leads	Time
TPA 1 / CD 1	Statistics / Status	Woody Russell / Dan McDonald / Jeff Lyon	9:00
TPA 6	Single-Shell Tank Corrective Action; M-45, -50, -60	Bob Lober / Jeff Lyon	9:05
TPA 8 / CD 5	Single-Shell Retrieval and Closure Program TPA Milestones Status; M-45-00 series, - Tank in Appendix H Status - C-Farm Critical Path - Tanks with Individual Milestones - Double-Shell Tank Closure - 242-A Evaporator Status SST Retrieval and Closure CD Milestones and TWRWP Status; D-00B series	Chris Kemp / Dan Knight / Jeff Lyon	9:20
TPA 18	SST Integrity Assurance; M-45-91	Jeremy Johnson/ Michelle Hendrickson	9:40
TPA 21	In Tank Characterization and Summary	Jeremy Johnson / Michael Barnes	9:45
TPA 22	Tank Operations Contract (TOC) Overview	Kathy Higgins / Jeff Lyon	9:50
TPA 30	Acquisition of New Facilities; M-90-00; M-47-00	Janet Diediker / Jeff Lyon / Dan McDonald	10:05
TPA 31	Supplemental Treatment and Part B Permit Applications; M-62-00, -20, -30, -45	Steve Pfaff / Jeff Lyon / Dan McDonald	10:10
TPA 32	System Plan; M-62-40	Dabrisha Smith / Jeff Lyon / Dan McDonald	10:15
	BREAK		
TPA 33 / CD 8	WTP Overall TPA and CD Summary and Milestones Status; M-62-01; M-62-49; D-00A-01, -06, -17	Delmar Noyes / Dan McDonald	10:30
TPA 34 / CD 10	WTP Pretreatment (PT) Facility; D-00A-13, -14, -15, -16, -19	Wahed Abdul / Dan McDonald	10:40
TPA 37 / CD 14	WTP High-Level Waste (HLW) Facility; D-00A-02, -03, -04, -21	Jason Young / Dan McDonald	10:50
TPA 38 / CD 17	WTP Low-Activity Waste (LAW) Facility; D-00A-07, -08, -09	Gary Olsen / Dan	11:00
TPA 40 / CD 20	WTP Analytical Laboratory (LAB); D-00A-05	McDonald	11:05
TPA 41 / CD 22	WTP Balance of Facilities (BOF); D-00A-12		11:10

Fiscal Year 2011 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-062-40A	Select a Minimum of 3 scenarios	10/31/10	10/27/10										
D-001-00-R46	Quarterly Report	10/31/10	10/28/10										
M-045-100	Submit to Ecology an Agreement Primary Document a Catch Tank "Assumed Leak" Response Plan.	12/28/10	12/28/10										X
M-045-101	Submit to Ecology as an Agreement Primary Document a Report on all Catch Tanks and Pipelines Used for SST Operations	12/28/10	12/28/10										
M-045-91A	Submit an Agreement Change Package with Interim Milestones to Implement the Panel's Recommendations M- 045-91	12/27/10	09/27/10										
M-045-92D	Complete Negotiations to Schedule Remaining 4 Additional Barriers	12/31/10	12/07/10										
M-045-92E	Meet Yearly on Performance of Barrier	12/31/10	12/07/10										

Fiscal Year 2011 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-062-20	Complete All 28 Issues in Independent WTP Flowsheet & Throughput Assessment	12/31/10	08/20/10										
M-045-80	Complete those Portions of C-200 Closure Demonstration Plan Necessary to Complete Closure Plan Development for SST System	01/31/11	12/28/10										
M-062-01V	Submit Semi-Annual Project Compliance Report	01/31/11	01/27/11										
D-001-00-R47	Quarterly Report	01/31/11	01/28/11										
M-045-91G-T05	Provide Report of the Visual Inspections of 12 SSTs in Table 3.3	03/31/11	03/11/11										
M-045-92K	Barrier 1 Design/Monitoring Approval from Ecology	06/30/11	05/19/11										
M-036-01A	Submit to EPA & Ecology Lifecycle, Scope, Schedule & Cost for Hanford Site (RL is DOE Lead)	07/25/11		X									

Fiscal Year 2011 Tri-Party Agreement Milestone Status

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Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-045-56G	Ecology and DOE Agree to Meet, at a Minimum, Yearly (by July)	07/31/11		X									
M-062-01W	Submit Semi-Annual Project Compliance Report	07/31/11		X									
M-045-91C	Implement DQO Process, Test Plan to Evaluate the Chemistries	09/30/11		X									
M-045-91G-T01	Provide AOR Final Doc. For SSTs on 530,000 Gallon Tanks	09/30/11		X									
M-045-13	Interim Completion of Tank S-112 SST Waste Retrieval and Closure	TBD [In accordance with M-045-84 or -85]		X									
M-045-13E	Complete Negotiations for Interim Milestones for Closure of S-112	TBD [In accordance with M-045-84 or -85]		X									

Fiscal Year 2012 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-062-30	Complete Negotiations Establishing Milestones for Near-Term Actions	10/25/11		X									
M-062-40B	Submit System Plan	10/31/11		X									
M-062-49	Submit Report to Ecology Demonstrating WTP Design Meets Vit. Criteria	10/31/11		X									
M-045-91B	Submit a Sampling and Analysis Plan to Ecology	12/30/11		X									
M-045-92F	Meet Yearly on Performance of Barrier	12/31/11		X									
M-045-91G-T02	Provide AOR Final Doc. For SSTs on 750,000 Gallon Tanks	01/31/12		X									
M-045-91F-T01	Provide Report of the Liquid Leak Rate Assessments	01/31/12		X									
M-045-91D	Submit Analytical Test Plan for Cores Removed from C-107 Plug	03/31/12		X									
M-045-91G-T06	Provide Report of the Visual Inspection of 12 SSTs per criteria in M-045-91G-T05	03/31/12		X									

Fiscal Year 2012 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
	Barrier 2 Design/Monitoring Approval from Ecology	06/30/12	05/19/11										
M-047-06	Complete Negotiation of No More Than 2 Interim Milestones	06/30/12		X									
	Provide Report of Liner Failures for SSTs	07/31/12		X									
M-045-91G-T03	Provide AOR Final Doc for SSTs on 1,000,000 Gallon Tanks	09/30/12		X									

WBS 5.2 Retrieve and Close Single Shell Tanks

M-045-58, Submit to Ecology for Review and Approval as an Agreement primary document, a phase 2 CMS Master Work Plan, Due: 12/31/08 Status: Complete.

Master Work Plan is in the Primary document revision process. ORP transmitted its response to Ecology on August 18, 2010. Ecology extended review of comment responses to October 29, 2010. Ecology requested at the October PMM a two week extension from October 27, 2010. ORP acknowledged that Ecology's comment response will be considered in abeyance until DOE-ORP, Ecology, and EPA complete their negotiation of the AIP applicable to Appendix I. Ecology assumed that negotiations would be done December 24, 2010. They have been extended.

M-045-60, Submit to Ecology for review and approval as an Agreement primary document DOE's Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C, Due: 12/31/08, Status: Complete.

ORP and Ecology continue to meet monthly to identify and manage changes in the work plan. The last meeting was held May 26, 2011. Meeting minutes for the April 28, 2011 sessions have been signed by the parties and have been entered into the TPA administrative record.

M-045-56G, Complete Implementation of Agreed to Interim Measures, Due: 07/31/11, Status: On Schedule

M-045-59, Control surface water infiltration pathways as needed to control or significantly reduce the likelihood of migration of subsurface contamination to groundwater at the SST WMAS (pending the CMS report, milestone M-45-58, and implementation of other interim corrective measures), Due: TBD, Status: On Schedule

M-045-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RFI/CMS Report for WMA C, Due: 12/31/14, Status: On Schedule

M-045-62, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Corrective Measures Study Report for WMA C, Due: 06/30/2015, Status: On Schedule

M-045-92, DOE and Ecology will establish selection criteria for installation of additional interim barriers at additional WMAs (beyond the T-106 and TY barriers), Due: 9/30/2016, Status: On Schedule.

M-045-92K, Barrier 1 Design/Monitoring Approval from Ecology, Due: 6/30/2011, Status: Complete.

M-045-92M, Barrier 2 Design/Monitoring Approval from Ecology, Due: 6/30/2011, Status: Complete. If negotiated, complete installation of 4 additional interim barriers at a rate of one per year, with the first being completed by October 31, 2012. Prior to beginning construction and at least sixteen months before construction is to be complete, DOE will submit to Ecology a final design and monitoring plan for each interim barrier. The barrier design and monitoring plans will be consistent with those developed for WMA T and TY unless DOE and Ecology agree otherwise. Ecology will authorize construction upon approval of these submittals. Ecology

letter, 11-NWP-044, dated May 19, 2011, approved the actions associated with these milestones. ORP sent letter 11-TF-064 to ECY on June 15, 2011 to formally close these milestones.

M-045-92F, DOE and Ecology will meet yearly to review the monitoring data, agree to changes in monitoring (if needed) and assess the performance of the demonstration barrier, Due: 12/31/2011, Status: On Schedule

Significant Past Accomplishments:

- 1. T-Farm interim barrier monitoring continues.
- 2. TY Interim Barrier monitoring continues.
- 3. Continued direct push characterization in C Farm at various planned locations. Initiated angled direct push campaign beneath tank C-101
- 4. Continued the joint process with Ecology and other regulatory agencies and stakeholders to define the inputs, approaches, assumptions and methods that will be used for development of a performance assessment for Waste Management Area C.
- 5. Continued remediation technology assessments in support of a Corrective Measures Study for WMA C.
- 6. Completed 90% design review for a surface barrier in 241-SX farm. Ecology transmitted their formal approval of the design to ORP on May 19, 2011.
- 7. Continued the Data Quality Objective process for the Phase 2 RFI-CMS work plan for WMA A/AX.
- 8. Issued report, RPP-RPT-49288, on reanalysis of well-to-well resistivity data from C Farm using recent advancements in codes and hardware.
- 9. Continued analysis of 3-D SGE data set for UPR-200-E-82 in C farm.
- 10. Deep electrodes placed during direct push campaign in eastern BY farm have been tested and found to have equilibrated with the surrounding soils.
- 11. Initiated direct push campaign in S-farm in support of a future interim barrier.

Significant Planned Actions in the Next Six Months:

- 1. Continue direct push campaign in C Farm.
- 2. Continue direct push campaign in S-Farm in support of a future interim barrier.
- 3. Initiate 3-D SGE data collection in eastern BY farm.
- 4. Complete resistivity data analysis for 3-D SGE characterization of UPR-82 in C Farm.
- 5. Continue remediation technology assessments in support of a Corrective Measures Study for WMA C.
- 6. Perform additional updates to WMA C RFI/CMS workplan based on requested changes from Ecology.
- 7. Initiate construction of the evapotransporation basin for the interim surface barriers for SX farm, and initiate construction.
- 8. Complete the Data Quality Objective process for the Phase 2 RFI/CMS work plan for waste management area A/AX.

Issues:

ORP is in internal discussions in consideration of Ecology's request for additional RFI/CMS milestones.

SST Retrieval and Closure Program

M-045-100, Submit as a primary document a Catch Tank "assumed leak response plan, Due: 12/27/10, Status: In Dispute. Transmitted from ORP to ECY via letter 10-TPD-176 on 12/28/10. Ecology issued a Notice of Violation on May 24, 2011, via letter 11-NWP-038, indicating that the deliverable did not fulfill the milestone. The ORP initiated dispute resolution on June 1, 2011, via letter 11-TF-065.

M-045-101, Submit to Ecology as a primary document a report on all catch tanks and associated pipelines in the SST System Part A, Due: 12/27/10, Status: Complete. Transmitted from ORP to Ecology via letter 10-TPD-176 on 12/28/10. Comments were transmitted from Ecology to ORP on May 27, 2011, via letter 11-NWP-048.

M-045-80, Complete those portions of C-200 Closure Demonstration Plan, Due: 1/31/2011 Status: Complete. Four primary documents transmitted from ORP to Ecology via letter 10-TPD-166 on 12/28/10. Comments on three of the four documents were transmitted from Ecology to ORP on May 27, 2011, via letters 11-NWP-045, 11-NWP-047, and 11-NWP-051. Ecology requested additional time to review *Radioactive Waste Determination Process Plan for Waste Management Area C Tank Waste Residual* via 11-NWP-049.

M-045-81, Implement & complete all remaining activities in C-200 Closure Demonstration Plan and provide a report of the results of those activities, Due: 9/30/2014, Status: On Schedule. The first deliverable specified in the closure demonstration plan was formally transmitted from ORP to ECY via letter 10-TPD-166 on 12/28/10. Comments were transmitted from Ecology to ORP on June 1, 2011, via letter 11-NWP-052.

M-045-82, Submit complete permit mod requests for Tiers 1, 2, & 3 of the SST, Due: 9/30/2015 Status: On Schedule

M-045-84, Complete negotiations of TPA interim MS for closure of second WMA, Due: 1/31/2017, Status: On Schedule

M-045-83, Complete the closure of WMA C, Due: 6/30/2019, Status: On Schedule

M-045-85, Complete negotiations of TPA interim MS for closure of remaining WMAs, Due: 1/31/2022, Status: On Schedule

M-045-70, Complete waste retrieval from all remaining SSTs, Due: 12/31/2040, Status: On Schedule

M-045-00, Complete Closure of all Single Shell Tank Farms, Due: 1/31/2043, Status: On Schedule

M-045-86, Submit retrieval data report to Ecology for 19 tanks retrieved, Due: TBD (12 months after retrieval certification), Status: On Schedule

Significant Past Accomplishments:

• See discussions above and related discussions in Consent Decree report.

Significant Planned Activities in the Next Six Months:

- See discussions above and related discussions in Consent Decree report.
- Work to discuss and resolve issues and comments associated with deliverables for M-45-100, 101, 80, and 81.

Issues:

- M-045-100 Notice of Violation (NOV): Ecology has given ORP an NOV (letter 11-NWP-038, dated 5/24/11) for a determination that the primary document for the Single-Shell Tank System Catch Tank Assumed Leak Response Plan (RPP-RPT-48438, Revision 0) does not fulfill the intent of milestone M-045-100. ORP initiated dispute resolution on June 1, 2011, via letter 11-TF-065.
- Tank Farm Soil Cleanup: Unsigned draft Tentative Agreement and unsigned draft Change Packages C-11-01 (for WMA C soil to be addressed as RCRA/CERCLA Past Practice Unit) and M-45-11-02 (title changes to M-045-61 and -62 to allow CAD/ROD process) were presented to Ecology on 03/29/11. Ecology preference is to address soils through a 3116 and RCRA process.
- The Richland Office of USDOE has proposed an IS-1 alternate to the planned deliverable, as we understand the "IS-1 Common Vision" discussion on 1-18-11. IS-1 requires the delivery of an RFI/CMS that would include Tank Farm Pipelines. This should be included in the critical path as well.
- C-106 Closure Plan approval and SST radiological Categorical Notice of Construction (NOC) Phase 3 (closure) and a toxics categorical NOC application are pending completion of the Tank Closure and Waste Management Environmental Impact Statement (EIS) and associated Record of Decision (ROD); forecast completion for the final EIS is in the Winter of 2011.
- USDOE is delaying the final numeric modeling supporting the WMA C performance assessment to align the timing with completion of the Tank Closure and Waste Management EIS. Impacts of this delay are being incorporated into the critical path schedules.

Tank in Appendix H. Status - Single Shell Waste Retrieval Criteria

Tank 241-C-106

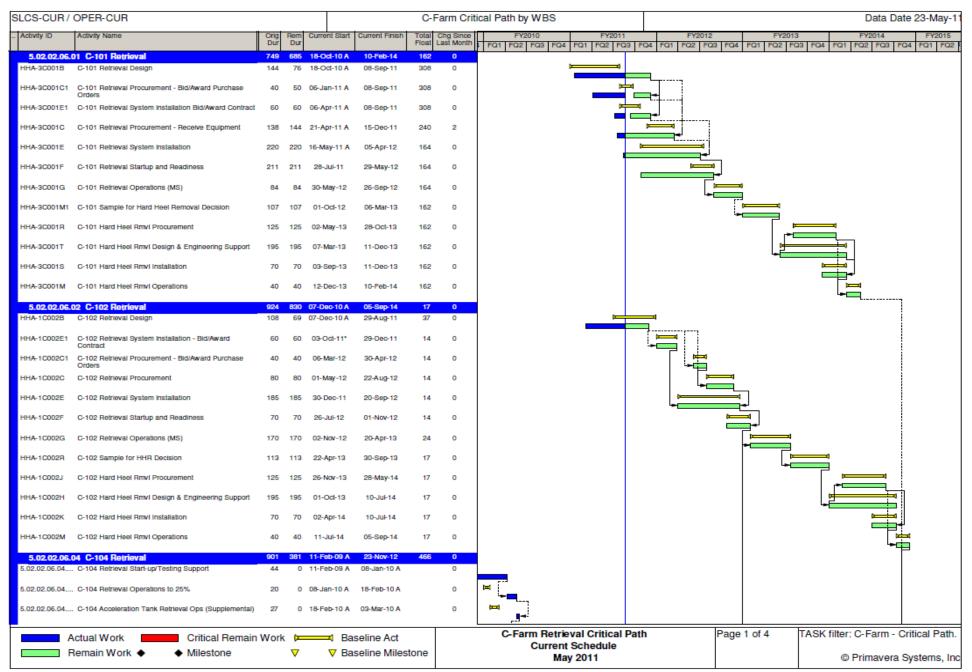
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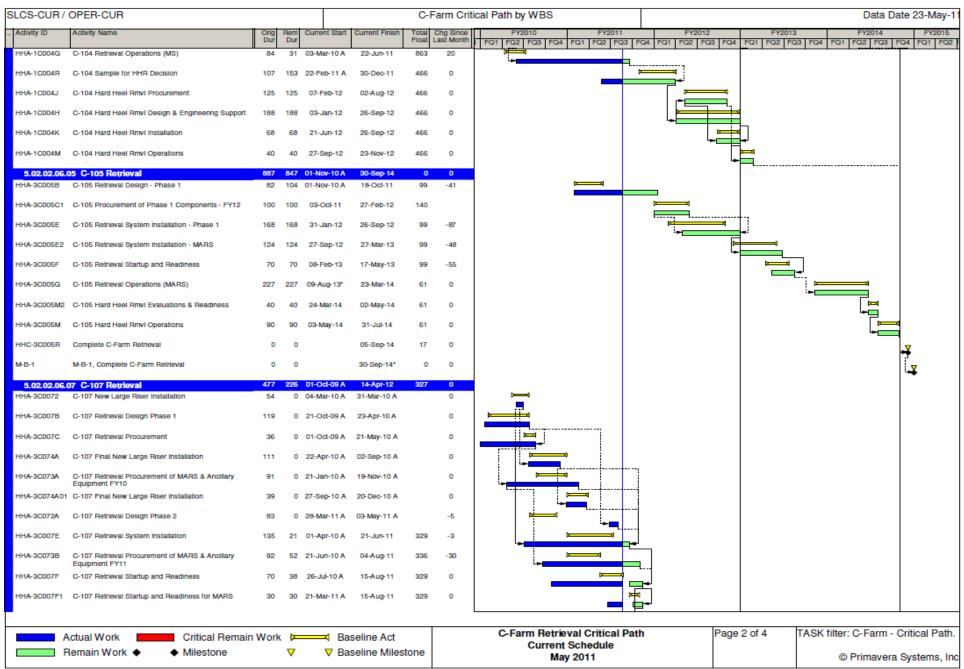
None

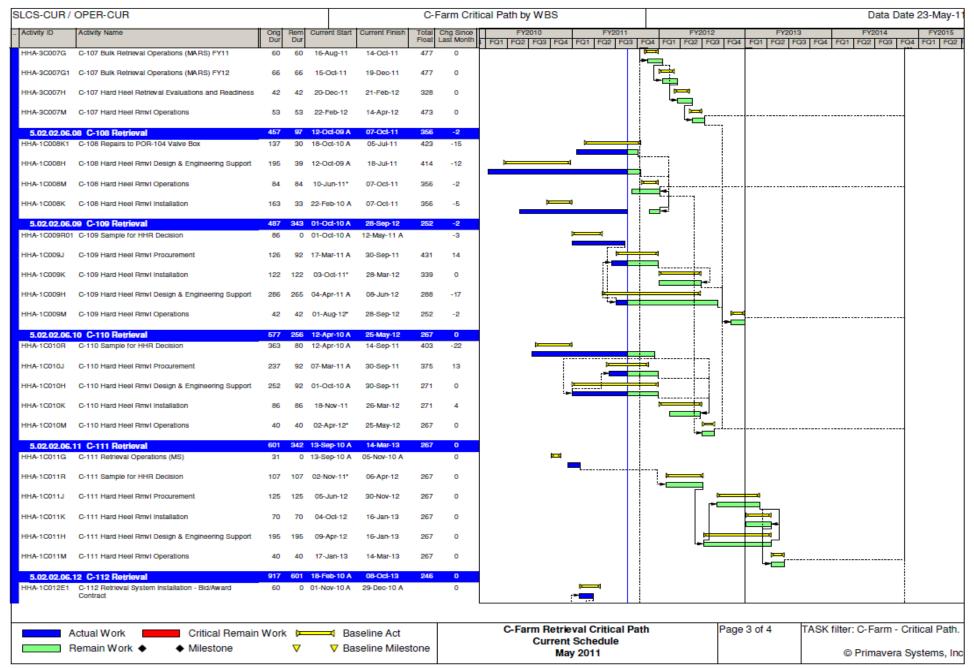
Significant Planned Activities in the Next Six Months:

• Continue U.S. Nuclear Regulatory Commission (NRC) review of the C-106 exception request. A Request for Additional Information (RAI) was received from the NRC in February 2009. (It has been discussed with the NRC that much of the additional information requested is dependent upon development of C-Farm residual waste PA and, therefore, cannot be provided until the PA is published.)

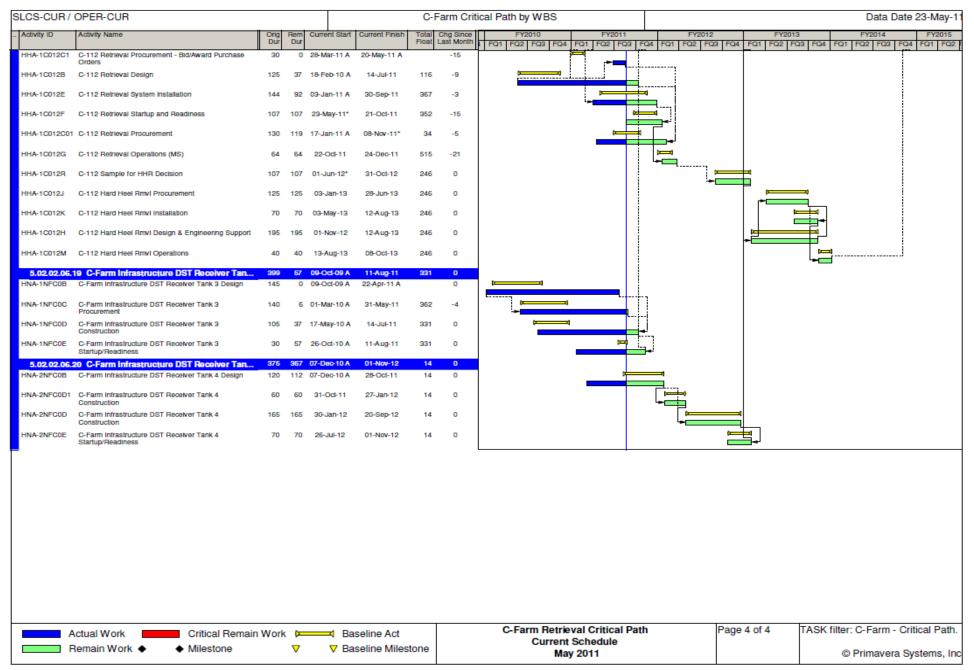
None







Monthly Project Summary



Tank Retrievals with Individual Milestones

Tank 241-A-103

M-045-15, Completion of Tank A-103 SST Waste Retrieval, Due: 9/30/22 Status: On schedule. Recent change package M-45-11-04 switched tank S-102 to A-103 with a completion date of 09/30/2022 for M-045-15.

M-045-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I, Due: 9/30/22, Status: On schedule. Updated with A-103 tank and due date of 9/30/22 per M-45-11-04 Change Package.

M-045-15D, Embedded Milestone, if appropriate, DOE will request an exception to waste retrieval criteria pursuant to Agreement Appendix H, Due: 9/30/22, Status: On Schedule. Updated with A-103 tank and due date of 9/30/22 per M-45-11-04 Change Package.

Significant Past Accomplishments:

• Change Package M-45-11-04 was signed by ORP and Ecology on 04/19/11.

Significant Planned Activities in the Next Six Months:

None

Issues:

None

Tank 241-S-112

M-045-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project, Due: TBD (in accordance with M-045-84 or M-045-85), Status: On Schedule

M-045-13E, Complete Negotiations for Interim Milestones for Closure of S-112, Due: TBD Status: On Schedule as part of M-045-84 and M-045-85.

Significant Past Accomplishments:

• Ecology letter of January 7, 2008, concurred with ORP that retrieval of Tank S-112 is complete.

Significant Planned Activities in the Next Six Months:

None

Issues:

None

Complete Closure of Double Shell Tanks

M-042-00A, Complete closure of all double shell tank farms, Due: TBD, based upon completion of retrieval under M-62-45 plus 5 yrs but no later than 9/30/2052 Status: On Schedule

Significant Past Accomplishments:	
None	
Significant Planned Actions in the Next Six Months:	
None	
Issues:	
None	

242-A Evaporator Status (previously reported under Milestone M-48, which has been closed out)

242-A Campaign strategy:

One (1) cold run (utilizing water only) and two (2) waste processing campaigns were completed in FY2010. No additional campaigns are anticipated in CY2011 due to ongoing 242-A and Tank Farm Life Extension and ARRA funded facility upgrades. The 242-A Campaign Strategy for FY2010 through FY2015 depicted below has been updated based on ORP-11242, River Protection Project Plan, Revision 5, and ongoing schedule integration efforts.

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY10	10-01	AW-106	AW-106	Campaigns 10-01/10-02 were performed back-to back starting in late August and completing in early October 2010.
FY10	10-02	AW-106	AW-106	Campaign 10-02 was an acceleration of previously planned Campaign 11-01.
FY11	NA	NA	NA	No campaign planned in FY11 due to ongoing 242-A and Tank Farm facility life extension and ARRA funded upgrades.
FY12	12-01	AP-107 AZ-102	AP-104 AP-107	Estimated start June 2012. Anticipates blending AZ-102 high cesium concentration with AP-107 waste. May require two (2) passes to achieve waste volume reduction.
FY12	12-02	AP-107 AZ-102	AP-107	Estimated start August 2012. Anticipates blending AZ-102 high cesium concentration with AP-107 waste. May require two (2) passes to achieve waste volume reduction.
FY13	13-01	AW-106	AP-107	Estimated start March 2013. Two (2) passes required.
FY13	13-02	AZ-101 AN-101 AW-106	AP-107	Estimated start September 2013. Two (2) passes required.
FY14	14-01	AN-106 AZ-102 AW-106	AP-107	Estimated start March 2014. Two (2) passes required.
FY15	15-01	AY-101 AZ-102	AP-107	Estimated start March 2015. Three (3) passes required.
FY15	15-02	AY-101	AP-107	Estimated start August 2015. Four (4) passes required.

SST Integrity Assurance

M-045-91G-T05, Provide to Ecology a report documenting and evaluating the visual inspection of 12 SSTs per the criteria listed in Table 3.3 in RPP-PLAN-46847, Rev.0, Due: 3/31/2011, Status: Complete 03/11/11 (Letter 11-TF-039). Ecology completed review and sent an approval letter stating ORP had met this milestone on 5/12/2011.

M-045-91C, implement the DQO process to develop and provide Ecology a Test Plan to evaluate the chemistries as specified in RPP-RPT-43 116. Rev 0, Due: 9/30/2011, Status: On Schedule

M-045-91G-T01, Provide to Ecology the Structural Analyses of Record final documentation for SSTs for 530, 000 gallon tanks (B, BX. C, T and U Farms), Due: 9/30/2011, Status: On Schedule

M-045-91B, Submit a Sampling and Analysis Plan to Ecology for the sampling of sidewall cores from tank 241-A-106 or alternate tank approved by Ecology, Due: 12/30/2011, Status: On Schedule

M-045-91F-T01, Provide to Ecology as a HFFACO secondary document a report evaluating the applicability to Hanford SSTs of the liquid leak rate assessments of sludge and salt-cake from the Savannah River Site, Due: 1/31/2012, Status: On Schedule

M-045-91F-T02, Provide to Ecology as a HFFACO secondary document a report evaluating the common factors of liner failures for SSTs that have leaked and will provide recommendations as appropriate, such as enhanced Leak Detection, Monitoring, and Mitigation, Due: 7/31/2013, Status: On Schedule, date changed with M-45-11-05 Change Control Form.

M-045-91G-T02, provide to Ecology the Structural Analyses of Record final documentation for SSTs for 750,000 gallon tanks (BY, S, TX and TY Farms), Due: 1/31/2012, Status: On Schedule

M-045-91D, Submit to Ecology an analytical test plan for the cores removed from the C-107 plug, Due: 3/31/2012, Status: On Schedule

M-045-91G-T06, Provide to Ecology a report documenting and evaluating the visual inspection of 12 SSTs per the criteria in M-045-91G-T05, Due: 3/31/2012, Status: On Schedule

M-045-91G-T03, Provide to Ecology the Structural Analyses of Record final documentation for SSTs for 1,000,000 gallon tanks (A, AX and SX Farms), Due: 9/30/2012, Status: On Schedule

M-045-91D-T01, Provide Ecology a report containing the results and interpretation of testing, and analysis performed on the concrete dome samples obtained from the Tank C-107 plug, Due: 5/31/2013, Status: On Schedule

M-045-91F-T03, Provide to Ecology, as a HFFACO secondary document a report assessing the feasibility of testing for ionic conductivity between the inside and outside of SSTs, Due: 5/31/2013, Status: On Schedule

M-045-91F-T04, provide to Ecology, as a HFFACO secondary document, a report on the 100-series single-shell tanks which have been or will be identified as having leaked in RPP-32681, Rev 0, Due: 7/31/2013, Status: On Schedule. M-045-91E, Provide to Ecology a compilation of the Single-Shell Tank farms dome deflection surveys every two years, beginning 9/30/2013, Due: 9/30/2013, Status: On Schedule

M-045-91G-T04, provide to Ecology the Structural Analyses of Record final documentation for SSTs for 55,000 gallon tanks (B, C, T and U Farms), Due: 10/31/2013, Status: On Schedule

M-045-91F, Provide to Ecology a report (Summary Conclusions Report on Leak Integrity) summarizing and evaluating the information submitted under M-045-91F-T01 through - T04, Due: 12/31/2013, Status: On Schedule

M-045-91G, Provide a Summary Conclusions Report of Structural Analysis of Record (AOR) for SSTs, Due: 4/30/2014, Status: On Schedule

M-045-91B-T01, Provide Ecology a report containing the results and interpretation of testing. and analysis, performed on the concrete core obtained from Tank A- 106 or alternate tank, Due: 9/30/2014, Status: On Schedule

M-045-91H, Submit a change package (if deemed necessary by DOE and Ecology) to establish additional milestones based on information obtained from the actions in the preceding M-045-91 series milestones to date, Due: 7/31/2015, Status: On Schedule

M-045-91I, Provide to Ecology an IQRPE certification of SSTs structural integrity for the remainder of the mission, or for such time as the IQRPE believes he/she can reasonably certify, Due: 9/30/2018, Status: On Schedule

Significant Past Accomplishments:

- M-045-91G-T05: Complete 03/11/11 (Letter 11-TF-039) Approved by Ecology 5/12/2011
- M-045-91B: Draft DQO report sent to Ecology 04/20/11. Comment resolution meeting held May 5/9/2011. All comments satisfactorily resolved.
- M-045-91D: Draft Analytical Test Plan for Tank C-107 dome core analyses were submitted to Ecology 5/5/2011. Ecology provided comments 5/11/2011 and authorized core samples to be shipped to the lab.

Significant Planned Actions in the Next Six Months:

• M-045-91B: Finalized DQO will be delivered with completion of M-045-91D in June. SAP is planned to be submitted to Ecology 07/2011 (approximately 5 months in advance). Due

12/30/11.

- Complete milestone M-045-91C, implement the DQO process to develop and provide Ecology a Test Plan to evaluate the chemistries as specified in RPP-RPT-43 116. Rev 0, Due: 9/30/2011. The DQO report is being drafted following Ecology review and comment.
- Complete milestone M-045-91F-T03, plan to provide Ecology, Ionic Conductivity Feasibility Report in July 2011. Due: 5/31/2013.
- M-045-91F-T04: Leak assessments are ongoing with meetings every other week through 2012.
- Complete milestone M-045-91G-T01, Provide to Ecology the Structural Analyses of Record final documentation for SSTs for 530, 000 gallon tanks (B, BX. C, T and U Farms), planned submittal to Ecology in July 2011 Due: 9/30/2011.
- Complete milestone M-045-91G-T02, Provide to Ecology the Structural Analyses of Record final documentation for SSTs for 750, 000 gallon tanks (BY, S. TX, and TY Farms), planned submittal to Ecology in October 2011. Due: 1/31/2012.
- Demonstrate the ability to obtain concrete core samples to support M-045-91B-T01. The demonstration will be performed outside the tank farms at a cold test site.
- Complete M-045-91D-T01 in 11/2011. Due:5/31/2013

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None.

In Tank Characterization and Summary

For the period from May 1 - May 31, 2011:

Accomplishments:

- Completed tank 241-AP-105 corrosion mitigation grab sampling on May 4, 2011
- Completed tank 241-AY-101 corrosion mitigation grab sampling on May 18, 2011
- Completed revision 1 of the data package RPP-RPT-46182, Final Report for Tank 241-AZ-101 Liquid Grab Samples in Support of the Corrosion Mitigation Program on May 2, 2011.
- Completed revision 0 of the data package RPP-RPT-48654, *Final Report for the Analysis of Waste Solids in Tank 241-C-110* on May 4, 2011.
- Completed Revision 1 of RPP-10226, Direction for Disposition of Tank Waste Samples in Archive on May 18, 2011.
- Completed revision 1 of RPP-RPT-43992, *Derivation of Best-Basis Inventory for Tank* 241-AN-106 as of April 1, 2011 for the FY11 quarter 3 BBI update on May 5, 2011.

Planned Action within the next Six Months:

- Tank Sampling
 - Tank 241-C-104 off riser sampling scheduled for October 2011.
 - Tank 241-AW-106 evaporator samples scheduled for November 2011.
 - Tank 204-AR-TK-1 compatibility samples scheduled for July 2011
 - Tank 241-C-108 hard heel dissolution samples scheduled for August 2011.
 - Tank 241-C-108 off riser sampling scheduled for November 2011.
- BBI Updates
 - Nine tank updates are planned for FY11 Quarter 3.
 - Two tanks are complete and the information sent to BBI users.
 - All seven of the other tanks have been started.
- Data Quality Objectives (DQO)
 - Complete revision 0 of the 244-CR Vault tanks in June 2011.
 - Complete revision 3 of the PCB Management DQO in July 2011.
 - Complete revision 0 of the SST Corrosion Test DQO in June 2011.

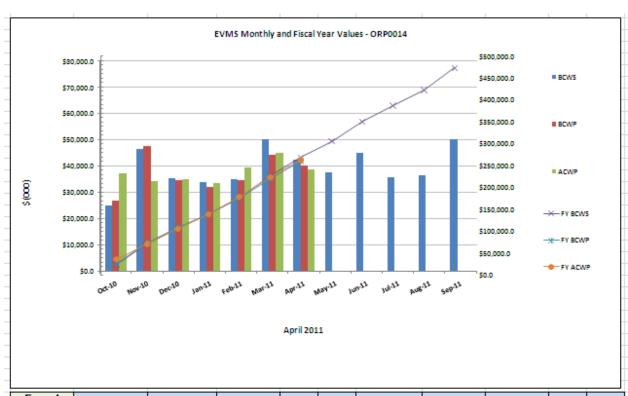
Issues:

None

TANK OPERATIONS CONTRACT (TOC) OVERVIEW

Project Performance

The earned value analysis is a comparison of cost and schedule contract-to-date performance. The earned value performance reporting reflects the format, Work Breakdown Structure (WBS) reporting levels, and variance thresholds as agreed to with the Tank Farms Operations Contractor (TOC) for monthly performance reporting. The earned value analysis is not intended to be a measurement of performance against existing Tri-Party Agreement Milestones.



Earned										
Value	BCVS	BCVP	ACVP	SPI	CPI	FY BCVS	FY BCVP	FY ACVP	FY SPI	FY CPI
Oct-10	\$24,918.8	\$26,782.0	\$37,083.6	1.07	0.72	\$24,918.8	\$26,782.0	\$37,083.6	1.07	0.72
Nov-10	\$46,528.0	\$47,510.9	\$34,301.0	1.02	1.39	\$71,446.8	\$74,292.9	\$71,384.5	1.04	1.04
Dec-10	\$35,469.5	\$34,558.3	\$35,056.5	0.97	0.99	\$106,916.3	\$108,851.1	\$106,441.0	1.02	1.02
Jan-11	\$ 33,862.5	\$ 32,115.2	\$33,376.8	0.95	0.96	\$140,778.8	\$140,966.4	\$139,817.8	1.01	1.00
Feb-11	\$35,157.1	\$34,800.5	\$39,288.6	0.98	0.88	\$175,935.9	\$175,766.8	\$179,106.4	0.99	0.98
Mar-11	\$50,219.3	\$44,202.5	\$45,098.7	0.88	0.98	\$226,155.2	\$219,969.3	\$224,205.1	0.97	0.98
Apr-11	\$42,344.0	\$40,218.8	\$38,772.0	0.95	1.04	\$268,499.2	\$260,188.1	\$262,977.1	0.97	0.99
May-11	\$37,492.6					\$305,991.8				
Jun-11	\$44,995.8					\$350,987.6				
Jul-11	\$35,810.2					\$386,797.8				
Aug-11	\$36,303.2					\$423,101.0				
Sep-11	\$50,232.8					\$473,333.8				
CTD	\$1,028,554.8	\$1,013,421.9	\$955,100.0	0.99	1.06					

The unfavorable current month (CM) schedule variance (SV) is (\$2,125k). The SV for the base contract work is (\$776k) and the Recovery Act (RA) work is (\$1,349k). The major contributors to the CM SV are shown below:

CLIN 1 - Base Operations (\$2,089k)

- RA 242-A Evaporator Upgrades, due to a delay in vendor delivery and installation of the exhaust skid. The vendor was impacted by late long-lead procurements and resolution of issues during the factory acceptance test. The exhaust skid was delivered in May.
- DST Integrity Project, due to delays in the double shell tank (DST) encasement pressure test in the AZ-01A pit driven by the late removal of jumpers and a failed pit coating inspection (recovery expected in May). Also, a late start in the AN-101 ultrasonic testing (UT) support driven by the crew working on predecessor activities for the AN-107 UT support, which was impacted by farm priorities (recovery expected in June).

CLIN 2 - Retrieval and Closure SST's \$153k

- C-107 Retrieval due to delays in the installation of the Mobile Arm Retrieval System (MARS) driven by system improvements and turnover documentation
- C-112 Retrieval due to delays in system installation related to tool development and removal of the polyvinyl liner from riser 6

The favorable CM SV above is offset by the following favorable variances:

- C-108 Retrieval due to recovery on the hard heel removal installation activities including the POR-104 exhauster valve box and early receipt of flexible jumpers, and the acceleration of post-retrieval sampling and analysis related to procurement of an Off-Riser Sampling System
- C-109 due to recovery on the setup and installation of the ORSS and completion of the sampling activity and shipment to the laboratory

CLIN 3 - WFD/Treatment Planning/DST Retrieval/Closure (\$233k)

• RA – Re-locatable Mixer Pumps, due to delays in the preparation of an acceptable 90 percent vendor design package for a mixer pump; rework/re-submittal is expected in May.

The unfavorable CM schedule variance (SVs) above are partially offset by the following favorable variances:

- AW Trailer Complex, due to acceleration of training and procurement of office furniture.
- RA- Exhauster Upgrades, due to the acceleration of the SY Farm exhauster design and the AP Farm Exhauster Design.

The unfavorable contract to date (CTD) schedule variance (SV) of (\$15,133k) is driven by the following projects:

CLIN 1 - Base Operations, (\$7,340k)

- RA-242-A Evaporator Upgrades due to delays in receiving the exhaust skid from the fabricator, which delayed installation
- DST Integrity Project, Delays on the Encasement Pressure Checks in the AZ-01A pit
- RA-Remove Obsolete Equipment due to delays in field work for the AN/AW Exhausters
- RA Sampling Operations due to fabrication delays on core sampling platform due to design changes

CLIN 2 - Retrieval and Closure SST's, (\$5,735k)

- C-107 Retrieval delays in completing the MARS resulting from addition system improvements and the related turnover documentation
- C-Farm Infrastructure DST Receiver Tank 3 due to the change in designation of DST #3
 receiver tank from AY-101 to AN-106 in order to utilize existing slurry distributor, and
 assembly
- C-108 Retrieval engineering and plant forces resources directed to higher priorities, delaying fabrication of key equipment, and modifications, repairs, and inspections needed to existing equipment prior to installation of new equipment
- SX Farm Infrastructure HVAC resources assigned to higher priority work

CLIN 3 – WFD/Treatment Planning/DST Retrieval/Closure (\$1,582k)

- RA-AZ Condensate Line Upgrade due to increased design efforts to support revised seismic qualification for the AZ-02A pit jumper, inability to locate a qualified vendor to NQA-1 standards, delays in procurement/fabrication and delays in fieldwork execution of the AZ Condensate Line Upgrades project due to the ventilation outage in the farm
- AY-102 Tech Maturation Mixing/Sampling Demonstration delays in the master agreement has caused delays in the "Design Services for Removal and Installation of Equipment for AY-102 In-Tank Upgrades" contract
- Waste Reduction Technology Demonstration delayed contract award in FY10 related to extensive legal reviews, additional delays for engineering reviews of procurement specification documents, and delays in approving procurements due to design changes.
- WFD PE Flow Sheet due to deferral of selected work scope into FY12
- RA-DST Feed Delivery Safety Analysis due to a two month delay in releasing the process hazards analysis (PrHA) due to higher priorities

The favorable contract to date (CTD) cost variance (CV) of \$58,322 is due to the following projects:

CLIN 1 - Base Operations, \$24,676k

- SST Safe Storage & Operations continuous labor and subcontract under runs because work was not performed as planned, partially offset with maintenance overruns
- 222-S Roof Replacement savings due to less material removal, efficient equipment and less hazardous waste
- RA-Remove Obsolete Equipment required fewer hours to prepare engineering documents to support the Demolish AN and AW Exhausters Projects
- RA-DST Valve Assembly Upgrades due to reduced pricing negotiations with the vendor for fabrication work
- RA Electrical Upgrades saving by consolidating similar field tasks
- RA-Drawing Reconstitution efficiencies gained through tank farm walk downs
- DST Infrastructure Upgrades on drawing/evaluations being performed for less than estimated
- RA-SY Farm Upgrades due to reduced engineering support on the Prefabricated Pump Pit Leak Detector and disposal of the SY Farm P-28 exhauster disposal costs
- AY/AZ Farm Upgrade Project due to negotiation of contract with the supply chain, the technical analysis and labor and contract efficiencies
- Liquidations due to rate true-up for FY09 and FY10
- Facility and Property Management due to saving from unfilled positions and slow ramp-up in FY09

• Information Resource Management due to receiving office equipment from Yucca Mountain site at a significant savings

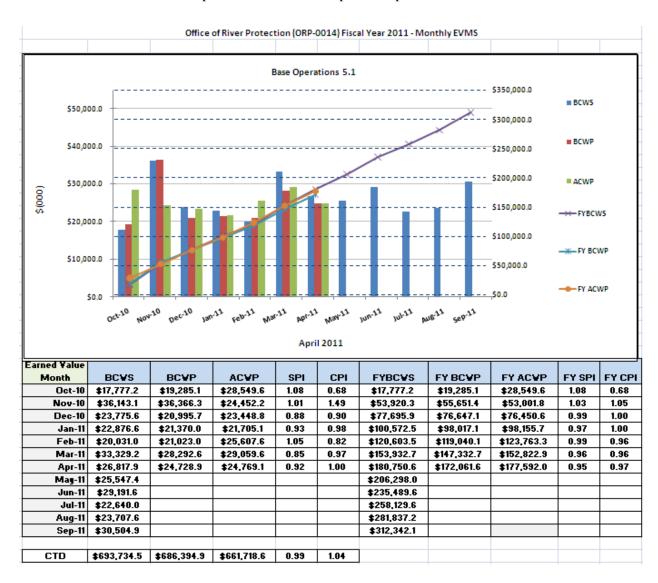
CLIN 2 - Retrieval and Closure, \$7,175k

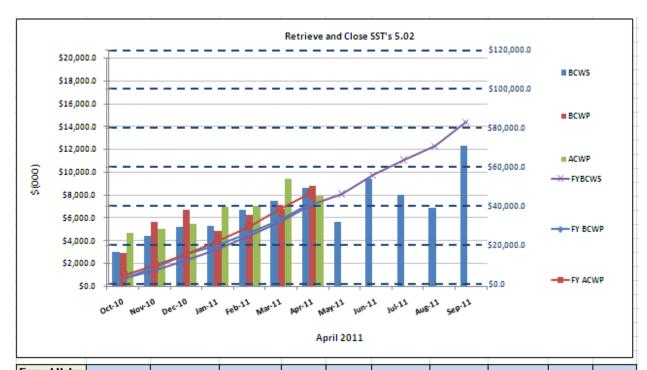
- Hose in Hose Transfer Line disposition efficiencies
- Catch Tank & Pipeline Reporting due to efficiencies gained by using direct labor rather than contract labor
- Interim Barrier efficiencies realized as part of the SGE activities by using multiple depth electrodes for data collection
- RA-Technology Development savings with the MARS vacuum contract from previous experience and designs
- RA-Interim Barrier Construction efficiencies due to the barrier material was significantly less than the spray on polyurea
- C-110 Retrieval due to efficiencies captured during C-110 waste retrieval operations because the amount of slurry solids was greater than the model predicted
- C-Farm Infrastructure DST Receiver Tank 3 due to efficiencies realized from changing the
 designation of the receiver tank from AY-101 to AN-106. Current infrastructure to the AN
 Farm avoids duplicating efforts to the AY Farms, which saves resources and reduces the
 amount of materials and equipment to purchase and install
- C-112 Retrieval due to efficiencies in project management and detail design support activities from using previous experience
- A/AX Common Infrastructure due to efficiencies realized from utilizing experienced, specialized engineers, co-location of the team for enhanced collaboration, and the use of relevant C Farm data
- C-108 Retrieval due to efficiencies in the training and mock up activities and acquisition of the samples
- Closure Demonstration due to less direct labor required to complete the Closure Demo Project Management project, Closure Demonstration in-stabilization project, and the diversion box feasibility study
- C-Farm Enhancements due to labor efficiencies achieved in design and procurement efforts and offsite trailer fabrication from using previous experience

5.3 - WFD/Treatment PLNG/DST Retrieval/Closure, \$25,403k

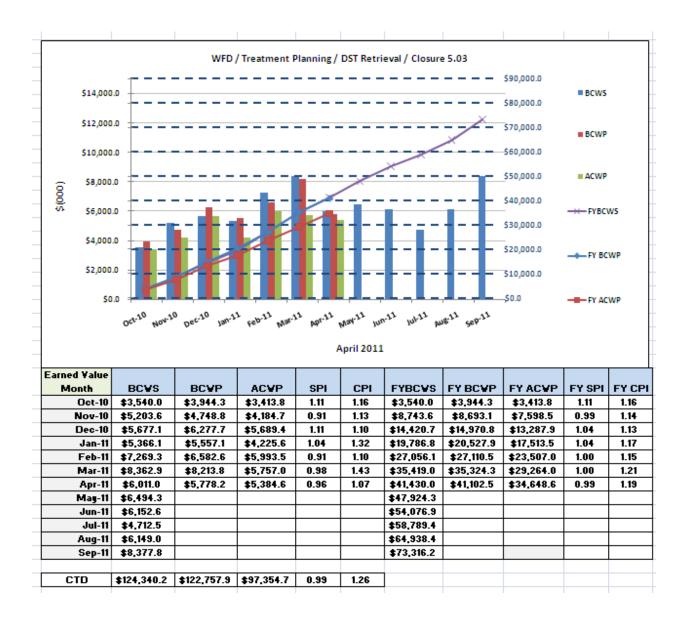
- WFD PE/Flow Sheet due to minimal contract support until the scope was established
- WFD Technical Baseline saving on technical work being completed with less engineering hours than estimated
- RPP System Plan efficiencies gained through G2 training, HTWOS model improvements and completed tasks in parallel
- DST Feed Delivery saving on staffing and design activities
- AW Cob Isolation efficiencies gained by awarding to an experienced contractor and requiring fewer resources than planned
- RA-SY Transfer Line Upgrades saving gained in the field, reduced duration and resources
- Hanford IHLW Storage Project Support on labor efficiencies
- Integrated Disposal Facility Glass Testing savings associated with executing glass dissolution modeling
- Interim Hanford Storage Facility Project Mgmt due to labor efficiencies
- WTP Interface Management delayed hiring project stall in the first quarter due to utilization of highly trained individuals with applicable experience
- RA-Secondary Waste Form Testing contractors completing DM-10 testing in parallel, labor efficiencies associated with Ceramicrete and FBSR test plan development

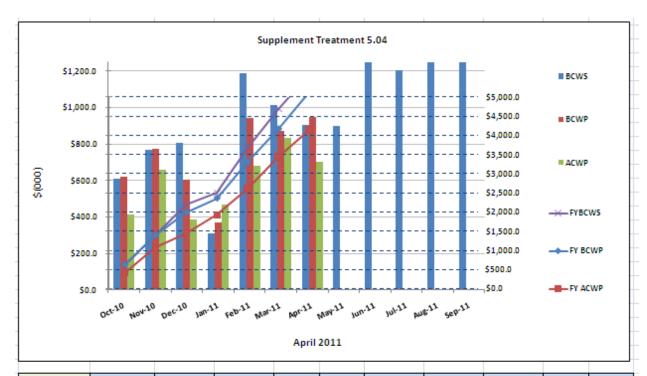
- Secondary Waste Treatment Project Mgmt and Support working with fewer resources than planned
- RA-WFE Specific Site & Regulatory Interfaces contract savings
- RA-SN-278/SN-279 and SN-285/SN-286 Transfer Line due to material and vendor labor efficiencies realized during fabrication of the wall penetrations and refurbished pipe and lower subcontract costs from using less expensive direct engineering resources to complete the design of the SY transfer line upgrades
- Tank Waste Database Management due to the use of fewer and lower cost resources to complete the Tank Waste Information Network Systems (TWINS) database diagnostic activities.
- RA-WFE Application Viability due to efficiencies from completing the SST consolidation pilot-scale testing, test plans, and procedures in parallel; lower rates for subcontract work; and less labor than planned. The work scope is complete.





Earned Value										
Month	BCVS	BCVP	ACVP	SPI	CPI	FYBCVS	FY BCVP	FY ACVP	FY SPI	FY CPI
Oct-10	\$2,991.6	\$2,932.6	\$4,707.6	0.98	0.62	\$2,991.6	\$2,932.6	\$4,707.6	0.98	0.62
Nov-10	\$4,412.7	\$5,622.7	\$5,006.7	1.27	1.12	\$7,404.3	\$8,555.3	\$9,714.3	1.16	0.88
Dec-10	\$5,209.7	\$6,682.7	\$5,494.0	1.28	1.22	\$12,614.0	\$15,238.0	\$15,208.3	1.21	1.00
Jan-11	\$5,310.0	\$4,820.2	\$6,975.6	0.91	0.69	\$17,924.0	\$20,058.2	\$22,183.9	1.12	0.90
Feb-11	\$6,670.0	\$6,253.2	\$7,006.6	0.94	0.89	\$24,594.0	\$26,311.4	\$29,190.5	1.07	0.90
Mar-11	\$7,513.3	\$6,825.3	\$9,447.6	0.91	0.72	\$32,107.3	\$33,136.7	\$38,638.1	1.03	0.86
Apr-11	\$8,613.5	\$8,766.1	\$7,914.2	1.02	1.11	\$40,720.8	\$41,902.8	\$46,552.3	1.03	0.90
May-11	\$5,638.9					\$46,359.7				
Jun-11	\$9,426.5					\$55,786.2				
Jul-11	\$8,022.8					\$ 63,809.0				
Aug-11	\$6,911.2					\$70,720.2				
Sep-11	\$12,322.2					\$83,042.4				
CTD	\$201,990.8	\$196,256.0	\$189,081.4	0.97	1.04					
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Earned Value										
Month	BCVS	BCVP	ACVP	SPI	CPI	FYBC¥S	FY BCVP	FY ACVP	FY SPI	FY CPI
Oct-10	\$ 610.0	\$ 619.9	\$412.6	1.02	1.50	\$ 610.0	\$ 619.9	\$412.6	1.02	1.50
Nov-10	\$768.6	\$773.1	\$ 657.3	1.01	1.18	\$1,378.6	\$1,393.0	\$1, 069.9	1.01	1.30
Dec-10	\$807.0	\$602.2	\$384.2	0.75	1.57	\$2,185.6	\$1,995.2	\$1,454.1	0.91	1.37
Jan-11	\$309.8	\$368.0	\$470.6	1.19	0.78	\$2,495.4	\$2,363.2	\$1,924.7	0.95	1.23
Feb-11	\$1,186.8	\$941.8	\$680.9	0.79	1.38	\$3,682.2	\$3,305.0	\$2,605.6	0.90	1.27
Mar-11	\$1,013.9	\$870.9	\$834.5	0.86	1.04	\$4,696.1	\$4,175.9	\$3,440.1	0.89	1.21
Apr-11	\$901.6	\$945.5	\$704.0	1.05	1.34	\$5,597.7	\$5,121.4	\$4,144.1	0.91	1.24
May-11	\$897.5					\$6,495.2				
Jun-11	\$1,251.4					\$7,746.6				
Jul-11	\$1,205.8					\$8,952.4				
Aug-11	\$1,385.8					\$10,338.2				
Sep-11	\$1,700.7					\$12,038.9				
CTD	\$8,489.3	\$8,013.0	\$6,945.3	0.94	1.15					

Acquisition of New Facilities

M-090-11, Complete the Negotiation of No More Than Two Canister Storage Facility Construction Interim Milestones, Due: 12/31/12, Status: On Schedule. Negotiations are not yet underway.

M-090-00, Acquire/modify facilities for storage of IHLW, Due: 12/31/2019, Status: On Schedule

M-047-06, Complete negotiation of no more than two interim milestones governing work necessary to support completion of M-047-00, Due: 06/30/12, Status: Negotiations are not yet underway.

M-047-00 Complete Work Necessary to provide facilities for management of secondary

waste from the WTP, Due: 12/31/2022, Status: On Schedule
Significant Past Accomplishments:
None
Significant Planned Actions in the Next Six Months:
None
Issues:
None

Supplemental Treatment and Part B Permit Applications

M-062-30, Complete negotiations establishing milestones for near term actions, Due: 10/25/11, Status: On schedule. Informal agreement has been reached between Ecology and ORP to develop a change package cancelling/deleting this milestone and allowing the elements required by this milestone to be considered during the M-62-40 or M-62-45 negotiations.

M-062-45ZZ, Negotiate a one-time supplemental treatment selection, Due: 4/30/2015, Status: On schedule. Negotiations are not yet underway. See "Issues" below for further discussion.

M-062-45ZZ-A, Convert M-062-31-T01 through M-062-34-T01 to Interim Milestones, Due: 4/30/2015, Status: On Schedule.

M-062-31-T01, Complete final design and submit RCRA Part B permit mod request, Due: 4/30/2016, Status: On schedule

M-062-32-T01, Start construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: 4/30/2018, Status: On schedule

M-062-33-T01, Complete construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: 4/30/2021, Status: On schedule

M-062-45XX, No later than 12/31/2021, the DOE and Ecology shall complete negotiations to establish a mechanism that will apply to resolve future disputes regarding the determinations in M-062-45, paragraphs 4 and 5, due: 12/31/2021, Status: On Schedule

M-062-34-T01, Complete hot commissioning of supplemental vitrification treatment facility and/or WTP enhancements, Due: 12/30/2022, Status: On schedule

M-062-21, Annually, submit data that demonstrates operation of the WTP, Due: 2/28/2023, Status: On Schedule

M-062-00, Complete Pretreatment Processing and Vitrification of HLW and LAW Tank Wastes, Due: 12/31/2047, Status: On Schedule

Significant Past Accomplishments:

Significant Planned Actions in the Next Six Months:

• ORP and Ecology sign a change package for M-62-30, as discussed above.

Issues:

• ORP received a letter from Ecology on 01/13/11 stating Ecology has "...formed the opinion that USDOE actions jeopardize completion of HFFACO Milestone M-062-30."

System Plan

M-062-40B, Submit a system plan describing the disposition of all tank waste managed by ORP, Due: 10/31/2011, Status: On Schedule

M-062-40C, Select a minimum of three scenarios that will be analyzed in the system plan, Due: 10/31/2013, Status: On Schedule

M-062-40D, Submit a system plan describing the disposition of all tank waste managed by ORP, Due: 10/31/2014, Status: On Schedule

M-062-40ZZ, Submit a one-time Tank Waste Supplemental Treatment Technologies report if a supplemental treatment technology is proposed other than a 2nd LAW, Due: 10/31/2014, Status: On Schedule.

M-062-45-T01, Every six years, within six-months after last revision of the System Plan, negotiate tank waste retrieval sequencing, Due: 4/30/2015, Status: On Schedule

Significant Past Accomplishments:

The 50% review of the draft System Plan 6 (SP6), which was focused on the model-independent portions of the document and included reviewers from ORP, Ecology and WRPS, was completed in May. All comments were dispositioned and incorporated as appropriate. HTWOS modeling and results verification have been completed for all 10 cases evaluated for SP6. Overviews of results for Case 3: FBSR for Supplemental Treatment, Case 7: Enhanced Tank Waste Strategy, and Case 9: Early U-Farm Retrieval, are currently with ORP and Ecology for review.

Significant Planned Actions in the Next Six Months:

In addition to HTWOS modeling results, TOC Life Cycle Cost Model (LCM) results are also being developed for each case. More detailed descriptions of case-specific results are being developed and incorporated into the draft SP6 document. Key issues, technology development, and integrated schedules are also being developed at this time and will be included. Draft SP6 will be released for a 90% review, which will allow ORP, Ecology and WRPS to review the entire document, for two weeks in July. Comments will be tracked and closed via RCRs. The finalized document will be approved by ORP, released by WRPS, and transmitted from ORP to Ecology in time to meet the Oct. 31, 2011 milestone due date.

Issues	•
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None

Hanford Waste Treatment and Immobilization Plant (WTP) Project

M-062-01W, Submit Semi-Annual Project Compliance Report, Due: 7/31/2011, Status: On Schedule

M-062-49, Submit a report to Ecology demonstrating that the WTP is designed to accomplish, pretreat 100% of retrievable waste, vitrify 100% of separated hi level waste, WTP LAW with Supplemental treatment can vitrify 100% of separated low level waste stream, Due: 10/31/2011, Status: BNI was provided direction to prepare this report on March 30, 2011, letter 11-WTP-106 Subject: Tri-Party Agreement (TPA) Changes and BNI Support. There are about 3,400 FTE equivalent contractor [Bechtel National Inc. (BNI)] and subcontractor personnel working on the WTP Project, including 1,200 craft, 500 non-manual, and about 180 subcontractor personnel FTE equivalents working at the WTP construction site (all facilities). Overall project percent complete through May 2011 is 59%, design and engineering is 82% complete, procurement is 62% complete, construction is 55% complete and Start-Up and Commissioning is 13% complete.

The overall WTP Project Schedule Variance (SV) in May was a positive \$0.2M, the Cost Variance (CV) was a negative \$2.5M. The negative cost variance was due to Construction Subcontracts and Construction Distribs control accounts and the schedule variances came primarily from Plant Material and Engineering control accounts.

Following is the status through the end of May for current project issues:

Significant Past Accomplishments:

• A permitting strategy for the on-site vessels modifications has been developed jointly and agreed upon between DOE and Ecology

Significant Planned Actions in the Next Six Months:

- Complete erection of 4th tier structural steel (77-ft to 98-ft elevation)
- Complete analytical results from the Low Order Accumulation Model (LOAM) validation testing for the non-Newtonian vessel configuration
- Complete planning and initiate fabrication and testing for the Large Scale testing for the validation of vessel mixing
- Complete Fabrication and Delivery of C5V Dampers
- Complete Siding of HLW Annex
- Complete installation of the LAW and LAB Autosampler systems
- Complete construction of the BOF switchgear facility, cooling tower and fuel oil pumphouse

Issues:

No significant issues at this time.

Pretreatment (PT) Facility

The PT Facility will separate radioactive tank waste into High Level Waste (HLW) and Low-Activity Waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Through May 2011, overall facility percent complete is 47%, engineering is 79% complete, procurement is 44% complete, and construction is 36% complete.

In May, overall construction continues to perform well. Rebar and embed installation and fabrication of rebar wall curtains continues to support additional slab and wall placements at the 56ft to 98ft elevations. Construction completions for May include placement of four 5th lift (77ft to 98ft elevation) walls for 480 CY.

On-going work includes fabrication of piping modules, installation of drain piping, service air piping, cable trays and supports, ductwork, and sparge tubing in the hot cell. Sparge tubing welding is 50% complete in the hot cell at elevation 0', with 80% forecast to be done by July.

Engineering continues to implement changes from the technical issue resolutions into Piping and Instrumentation Design (P&ID) and piping isometric drawings. Preliminary analysis for Pretreatment Vessel Vent Process (PVP) aerosol generation has been completed which indicates a possible factor of 10x improvement. When finalized (in June), this would eliminate the biggest PVP re-design risk of the need for de-entrainment equipment. Issued calculations for Ultrafiltration Process (UFP) vessels 1A & 1B, and issued drawings for implementation of the vessel mixing issue resolution and other changes.

A permitting strategy for the on-site vessels modifications has been developed jointly and agreed upon between DOE and Ecology, which allows for modification work to begin in parallel with the permit review and approval process.

Procurement received seven pipe rack frames at the Marshalling Yard. They will now be sent to the Rack Integrator for installation of piping and valves later this year. The HLP-22 vessel vendor was substantially released for fabrication. The UFP VSL-1B bottom head jacket has been removed. A small team of DOE and BNI management visited vessel fabricators North West Copper and Harris Thermal in Portland, to watch and understand the status and issues with the vessel fabrications. The team noted some challenges with the fabrication, and decided that further discussions regarding the path forward were needed.

Procurement issued a Material Requisition (MR) for quotes on rotary-progressive-cavity pumps, and issued a MR for purchase of the PT chiller plant and cooling tower. Thirty five jet pump pairs, and one globe control valve, were released to ship.

Significant Planned Actions in the Next Six Months:

- Completion of PEMP Milestones for re-Committed design of the CXP and FRP vessels
- Install hot cell piping PJV header
- Ship HLP-VSL-27A /27B Storage vessels
- Complete nineteen mechanical systems re-committed design packages
- Complete twelve process re-committed design packages
- Fab and deliver ten hot cell equipment frames
- Complete analytical results from the Low Order Accumulation Model (LOAM) validation testing for the non-Newtonian vessel configuration

- Complete planning and initiate fabrication and testing for the Large Scale Testing for the validation of vessel mixing
- Issue the revised P&ID's for the PVP system and the PVV system
- Begin Control Building basement excavation in late June
- Complete placement of one 56ft elevation slab, three 4th lift (56ft to 77ft) walls, twenty five 5th lift walls, three 98ft slabs, and complete placement of the Control Building slab, totaling approximately 4,128 CY
- Complete erection of 4th tier structural steel (77ft to 98ft elevation)
- Award contract for High Efficiency Mist Eliminator (HEME)
- Award contract for on-site vessel modifications

Issues:

- Testing of the HEPA filters performed at Mississippi State University (MSU) has demonstrated that they will fail during a Design Basis Event (DBE). This would require design changes by the vendor (Flanders).
- DOE sent comments on the BNI ABAR rejecting the change of inspection criteria for the fusion welder, regarding non-compliance with the code. BNI should still be able to use the fusion welder using existing ASME B31.3 code criteria.
- DOE needs to formally provide to BNI the feed vectors from System Plan 6, for them to use that as reference for TPA Milestone M62-049, Certification of WTP design to meet the mission.
- Vessel Critical Path: Fabrication of vessel HLP-22 continues to be the primary critical path for the PT Facility. The fabrication of the vessel is in progress and on track to complete as planned by October 2012. Efforts are also ongoing for the analysis of the on-site vessels in order to support the vessel modifications. Initial site work and pre-modification preparation work has begun. Schedules for the vessel modifications and permit needs have been provided to Ecology. The current plan is to award the first set of vessels modifications in early July 2011. Ecology authorization is required to proceed with the vessel alteration for Waste Feed Receipt Process (FRP) vessels 2A/B/C/D. Ecology is being briefed routinely on the status of vessel design, fabrication and permitting schedule, due to the critical nature of this activity.
- LOAM Test Results: The physical benchmark testing of the LOAM for application to the 5 non-Newtonian vessels is complete. The test report has been issued for DOE review, and scheduled to be finalized by June 15, 2011.
- PVP/PVV System Upgrades: The PVP/PVV systems were upgraded from passive to active safety systems to maintain negative pressure during all normal, off-normal, and Design Basis Earthquake (DBE) conditions. Changes in the requirement of the Entrainment factor, the postulated aerosol loading was increased by several orders of magnitude. This affected PVP/PVVs ability to meet functional requirements during off-normal condition. The execution strategy issued identifies the following actions to ensure that the system design meets the functional criteria:

- 1. Develop an improved aerosol model based on testing that is aligned with the physical plant configuration. Preliminary indications are that this would lower the aerosol loading significantly.
 - a. Draft aerosol testing strategy has been issued.
- 2. Evaluate alternative operating scenarios to reduce aerosol generation.
- 3. Procure the long-lead equipment (Scrubber and HEME) as SC-1 to mitigate schedule constraint.

High-Level Waste (HLW) Facility

The HLW Facility will receive the separated high-level waste from the Pretreatment (PT) Facility. The concentrate is blended with glass formers and converted into molten glass in one of the two HLW melters and then poured into cylindrical stainless steel canisters. After cooling, the canisters are sealed and decontaminated prior to shipment to interim storage. Overall facility percent complete is 54%, with engineering design 87% complete, procurement 66% complete, and construction 34% complete.

Significant Past Accomplishments:

The majority of HLW Filter Cave activities have transitioned from procurement to the installation phase. Installation of the C5V supply header and exhaust headers are complete. Additional activities include the installation of support steel to the +8ft elevation and installation of construction support steel for installation of the 42" C5V Vertical Riser. Installation of steel and piping will continue to the +14ft elevation to coordinate with upcoming filter housing installations.

Fabrication of the final C5V filter housing is complete and all of the units have been delivered to the site. The vendor is continuing fabrication of the HOP and PJV filter housings and progressing as planned. Despite early material supply issues, fabrication of the C5V remote-operated dampers has been accelerated to maintain the original scheduled delivery of the first units in late-July. Electrical and piping commodities are progressing throughout the -21ft elevation including cooling water, cable trays and supports, and fire protection piping.

Significant Planned Actions in the Next Six Months:

- Receive Canister Decontamination Vessels and Canister Rinse Vessel
- Set Shielded Personnel Access Door RWH-DOOR-20 in the Waste Drum Swabbing and Monitoring Area
- Complete Fabrication and Delivery of C5V Dampers
- Complete Siding of Annex
- Receipt of Melter Cave 1 and 2 Feed and Feed Prep vessels
- C5V housing and remote-operated damper installations

Issues:

The fabrication and delivery of HLW vessels is being monitored closely due to long lead times and construction acceleration. Vessel status and progress is reported weekly to ensure completion and delivery prior to the scheduled installation dates.

Wall complexity for the #2 Melter Cave is impacting unit rates and adding duration to schedule activities. The Filter Cave still remains on the critical path; however, melter cave build-out is being closely monitored. Lessons learned are being incorperated into #1 Melter Cave walls' activities to ensure a more efficient construction sequence.

Low-Activity Waste (LAW) Facility

Significant Past Accomplishments:

The LAW Facility will vitrify low-activity waste from the PT Facility. Waste will be mixed with glass formers, vitrified into glass at an average daily rate of 30 metric tons, and placed in stainless-steel canisters that will be disposed on site in the Integrated Disposal Facility. Overall facility percent complete is 65%, engineering is 90% complete, procurement is 83% complete, and construction is 63% complete.

LAW secondary offgas treatment system component procurement activities continued. Vendor activities are progressing as scheduled for all offgas system components. Other procurement activities included issuance of a purchase memorandum for bid on the LAW/LAW Annex architectural specialties subcontract and release for shipment of 14 flow-indicator rotameters.

Isometric drawings were issued for multiple systems within the LAW facility including the Breathing Service Air (BSA) system, the Radioactive Liquid Waste Disposal (RLD) system, as well as piping isometrics for the Secondary Offgas/Vessel Vent Process (LVP), Steam Condensate Water (SCW), High-Pressure Steam (HPS), Low-Pressure Steam (LPS), Sodium Hydroxide Reagent (SHR), Concentrate Receipt Process (LCP), Melter Feed Process (LFP), and Autosampling (ASX) systems. Several drawing revisions were also issued to incorporate vendor information and for equipment modifications. General arrangement data sheets were issued for instrument racks for the LVP system, as well as instrument data sheets for radar instruments, transmitters, and switches. The anchorage design for the Heating, Ventilation, and Air-Conditioning (HVAC) humidifier was completed.

BNI completed installation of the glove box and two hatches for the container finishing handling (LFH) system, the electrical components and fusible links for six doors in the cask handling area, placement of concrete for the Medium-Voltage Electrical (MVE) equipment foundations, and application of floor coatings in the bogic maintenance room. Construction started on installation of support arms in the process cells and Q-rated partition walls. Thermite welding of rails in the finishing line continued, as well as installation of the fire alarm system, Low-Voltage Electrical (LVE) system equipment, piping for the air-handling unit, fan-coil units and humidifiers for the C2V ventilation system, liner in the pour caves, and container finishing line hoists. Other normal activities continued, including installation of piping for the Non-Radioactive Liquid Waste Disposal (NLD), RLD, and Plant Cooling Water (PCW) systems within the LAW, as well as installation of cable tray, pipe hangers, conduit and wiring, instrument enclosures, lighting fixtures, partition walls, and coatings.

Revised control logic diagrams were issued for the RLD system to support software development and testing. Integrated Control Network (ICN) development continued with the review of software for the primary offgas process system. Commissioning Operations personnel continued working with BNI Engineering to resolve issues associated with freeze protection strategies for sprinkler piping in stagnant air spaces, the need for container decontamination equipment, and location of computer servers that will provide phone and PA communications capabilities. A recommendation was made to Engineering to consider requiring a better carbon bed adsorber carbon media replacement system design prior to any relaxation of media life requirements.

Significant Planned Actions in the Next Six Months:

- Complete vendor fabrication of the Carbon Bed Adsorber (CBA)
- Complete installation of container handling line shield doors
- Complete installation of the ASX system

Issues:

CBA fabrication difficulties were encountered related to warpage due to welding. Bechtel personnel deployed to the vendor facility, including welding engineers, have revised the assembly techniques to successfully resolve the issue and help preserve the schedule.

Analytical Laboratory

Significant Past Accomplishments:

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. Overall facility percent complete is 46%, engineering is 81% complete, procurement is 74% complete, and construction is 63% complete.

On-going construction work includes: the installation of piping in the C2V/C3V system pits, autosampler equipment above the hot cells, trolleys in the hot cells, bulk piping/hanger installation, and conduit in various planning areas. Construction completed installation of the grout covers in the area of the hot cells.

Engineering completed scoping of 15 medium-voltage electrical drawings, all mechanical handling, "M7", drawings for in-cell handling and radioactive solid waste handling, and system block diagram, "J1", drawings for all lab systems. Material requisitions for jet-pump-pair fluidic devices were issued.

As construction and engineering continue commissioning personnel are diligently working on procedure development for caustic and/or oxidative leach during the batch processing of the feed slurry, as well incorporating comments to the Waste Acceptance Criteria Data Quality Objective Report. The operations team is inquiring about the date the LAB will have its environmental permits to allow for methods validation. The operations staff accepted proposed vendor cost savings measures to replace drawer slides and counter top fixtures, other suggestions were either denied or referred to the design authority.

Significant Planned Actions in the Next Six Months:

- Install fume hoods
- Install LAB waste drum bogie transfer port
- Install Autosampler HEPA filter housings
- Install hot cell monorail airlocks
- Complete installation of Autosampler System

Issues:

No major issues.

Balance of Facilities (BOF)

Significant Past Accomplishments:

BOF provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. Overall facility percent complete for BOF is 47%, engineering is 78% complete, procurement is 46% complete, and construction is 61% complete.

Construction of BOF is progressing, and systems are being completed as demonstrated by the completion of the water treatment facility. Progress continues in the areas of plant service air for the glass former facility, fire detection equipment for the T-52 building, and cable, electrical terminations, and pressure safety valve instrumentation for the plant cooling water system in the chiller compressor plant.

The operations staff continues to evaluate facilities as they are constructed and turned over, and proposed a field change to add low point drains to the domestic water system, and concerns with the fact that the glass former facility does not have a redundant air dryer. They are also actively involved in evaluating the requirements of the emergency turbine generators.

Significant Planned Actions in the Next Six Months:

- Complete construction of cooling tower
- Complete construction of fuel oil pumphouse
- Substantially complete construction of main switchgear building
- Complete construction of BOF switchgear building
- Install structural steel for anhydrous ammonia facility
- Emergency turbine generator supplier selection and notice to proceed
- Award hi-purity gas subcontract

Issues:

- Welding of anhydrous of ammonia vessel
- Evaluation, selection, and procurement of emergency turbine generator

Waste Treatment Plant Project - Percent Complete Status Through May 2011																
(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars				Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Commissioning Unallocated Dollars		
Facilities	Performance Measurement Baseline (PMB)	_	% Complete	Performance Measurement Baseline (PMB)	Performed	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Performed		
Low-Activity Waste	938.6	615.9	66%	222.5	200.7	90%	234.9	195.6	83%	333.1	213.3	64%	148.1	6.3	4%	
Analytical Lab	346.1	160.7	46%	52.2	42.3	81%	56.1	41.5	74%	102.7	65.2	63%	135.2	11.8	9%	
Balance of Facilities	522.5	245.4	47%	77.3	60.3	78%	81.2	37.5	46%	227.8	138.8	61%	136.1	8.9	7%	
High-Level Waste	1,460.3	783.1	54%	332.1	289.6	87%	454.1	299.9	66%	556.3	189.4	34%	117.8	4.2	4%	
Pretreatment	2,475.2	1,174.9	47%	680.4	534.2	79%	714.3	312.4	44%	897.9	322.5	36%	182.6	5.8	3%	
Shared Services	4,781.8	3,228.1	68%	1,093.2	881.4	81%	467.2	350.6	75%	1,417.8	1,018.6	72%	455.8	111.4	24%	
Total WTP w/o UB	10,524.4	6,208.2	59%	2,457.8	2,008.5	82%	2,007.8	1,237.6	62%	3,535.6	1,947.6	55%	1,175.5	148.4	13%	
Undistributed Budget	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Total WTP	10,524.4	6,208.2	59%	2,457.8	2,008.5	82%	2,007.8	1,237.6	62%	3,535.6	1,947.6	55%	1,175.5	148.4	13%	

Source: WTP Contract Performance Report - Format 1, Data for May 2011

Note: Starting with the June 2009 report, facility Construction percent complete values decreased significantly, and a couple of Design/Engineering facility percent complete values went down as well. The decrease in values was tied to Phase I of BNI's elimination of WBS 1.08, Plant Wide EPCC; scope from WBS 1.08 was moved to facilities as appropriate or to WBS 1.90, Shared Services. This resulted in an increase in the facility construction budgets, which has correspondingly reduced the to-date percent complete values. In July 2010 the allocation of 1.90 to the facilities was removed to show true facility percent complete.

¹ Note: EVMS data is through May 2011.